

# Thickness Gages

## SERIES 547, 7

The Thickness Gages offer a quick and efficient means of inspection with their convenient grip handle, thumb trigger and spring-loaded spindle. The various models cover a wide range of applications.

### FEATURES

- Wide range of applications with various types of measuring faces (on the spindle and anvil).

### Flat Anvil Type

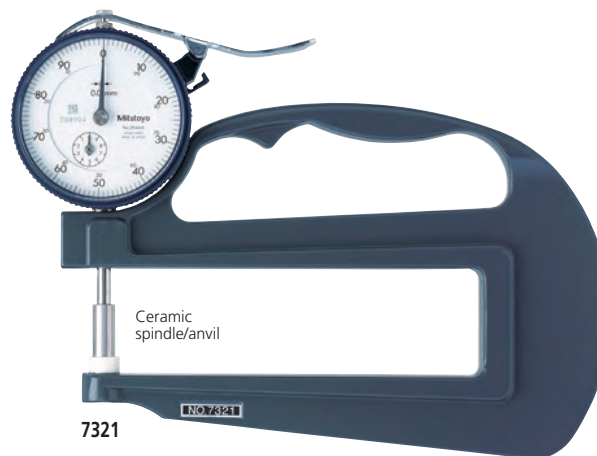
#### Standard Type / Digital



#### Deep Throat Type / Digital



#### Deep Throat Type / Dial

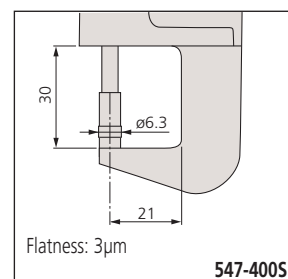


#### High Accuracy Type / Digital



- The digital models incorporate Mitutoyo's popular ID-C and ID-S Series Digimatic Indicators to provide error-free LCD readings as well as data output for SPC analysis.
- 547-400S is ideally suited for measuring thicknesses of paper, film, wire, sheet metal and similar materials.

### DIMENSIONS



SPC

ABSOLUTE<sup>®</sup>  
Absolute System Patented by MITUTOYO

### Technical Data Function of Digital Models

#### IDS Types

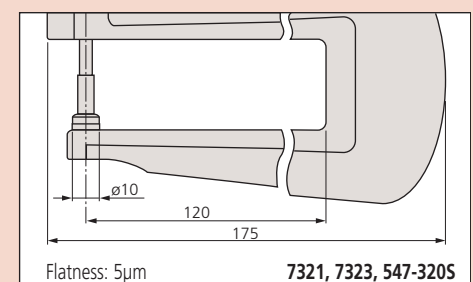
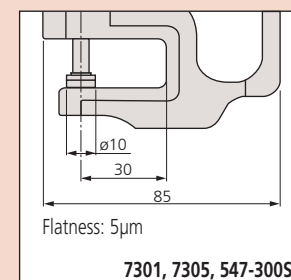
- ON/OFF
- Inch / mm Conversion
- Origin
- $\pm$ Direction Changeover
- SPC Output
- Battery Life: 20,000 hrs
- Power Supply: Silver Oxide Cell (SR-44 1pc.)

#### IDC Types

- ON/OFF
- Inch / mm Conversion
- Zero / ABS
- $\pm$ Direction Changeover
- SPC Output
- Battery Life: 5,000 hrs
- Power Supply: Silver Oxide Cell (SR-44 1pc.)
- Preset
- Provides GO /  $\pm$ NG Judgement
- Face Rotates 330°

### DIMENSIONS

Unit: mm



# Thickness Gages

## SERIES 547, 7

### Optional Accessories

- 905338:** SPC cable (40" / 1m) for digital type  
**905409:** SPC cable (80" / 2m) for digital type  
**902794:** Spindle lifting lever for IDS digimatic type (stroke .5" / 12.7mm)  
**21AZB149:** Spindle lifting lever for digimatic and dial thickness gage (stroke .5" / 12.7mm)  
**21AZB150:** Spindle lifting lever for dial indicator (stroke 1" / 25.4mm)

### Flat Anvil Type

#### SPECIFICATIONS

| Inch/Metric         |                 | Digital Type    |          |                 |               |
|---------------------|-----------------|-----------------|----------|-----------------|---------------|
| Range               | Order No.       | Resolution      | Accuracy | Measuring force | Indicator     |
| 0 - .47" / 0 - 12mm | <b>547-500</b>  | .0005"/0.01mm   | ±.001"   | 1.5N or less    | Digimatic IDS |
| 0 - .47" / 0 - 12mm | <b>547-520</b>  | .0005"/0.01mm   | ±.001"   | 1.5N or less    | Digimatic IDS |
| 0 - .47" / 0 - 12mm | <b>547-526</b>  | .0001"/0.001mm  | ±.0002"  | 1.5N or less    | Digimatic IDS |
| 0 - .4" / 0 - 10mm  | <b>547-300S</b> | .0005"/0.01mm   | ±.001"   | 1.5N or less    | Digimatic IDC |
| 0 - .4" / 0 - 10mm  | <b>547-320S</b> | .0005"/0.01mm   | ±.001"   | 1.5N or less    | Digimatic IDC |
| 0 - .47" / 0 - 12mm | <b>547-400S</b> | .00005"/0.001mm | ±.00015" | 3.5N or less    | Digimatic IDC |

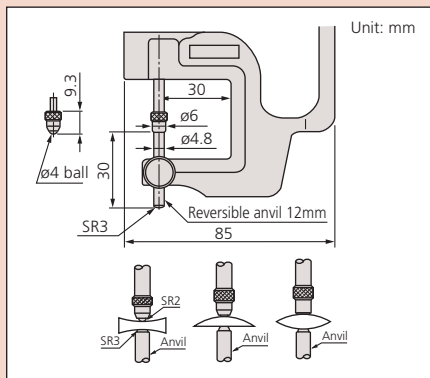
#### Inch Dial Type

| Range    | Order No.    | Graduation | Accuracy | Measuring force | Remarks                                  |
|----------|--------------|------------|----------|-----------------|------------------------------------------|
| 0 - .05" | <b>7326S</b> | .0001"     | ±.0002"  | 1.4N or less    | Fine dial reading, ceramic spindle/anvil |
| 0 - .5"  | <b>7300S</b> | .001"      | ±.001"   | 1.4N or less    | Standard, ceramic spindle/anvil          |
| 0 - 1"   | <b>7304S</b> | .001"      | ±.002"   | 2.0N or less    | Standard, ceramic spindle/anvil          |
| 0 - 1"   | <b>7322S</b> | .001"      | ±.002"   | 2.0N or less    | Deep throat, ceramic spindle/anvil       |

#### Metric Dial Type

| Range    | Order No.   | Graduation | Accuracy | Measuring force | Remarks                                  |
|----------|-------------|------------|----------|-----------------|------------------------------------------|
| 0 - 1mm  | <b>7327</b> | 0.001mm    | ±5µm     | 1.4N or less    | Fine dial reading, ceramic spindle/anvil |
| 0 - 10mm | <b>7301</b> | 0.01mm     | ±15µm    | 1.4N or less    | Standard, ceramic spindle/anvil          |
| 0 - 20mm | <b>7305</b> | 0.01mm     | ±20µm    | 2.0N or less    | Standard, ceramic spindle/anvil          |
| 0 - 10mm | <b>7321</b> | 0.01mm     | ±15µm    | 1.4N or less    | Deep throat, ceramic spindle/anvil       |
| 0 - 20mm | <b>7323</b> | 0.01mm     | ±22µm    | 2.0N or less    | Deep throat, ceramic spindle/anvil       |

### DIMENSIONS



### Lens thickness measurement (reverse anvil)



**SPC**  
**ABSOLUTE**  
 Absolute System Powered by MITUTOYO



#### SPECIFICATIONS

| Inch/Metric         |                 | Digital Type  |          |                 |               |
|---------------------|-----------------|---------------|----------|-----------------|---------------|
| Range               | Order No.       | Resolution    | Accuracy | Measuring force | Indicator     |
| 0 - .47" / 0 - 12mm | <b>547-512</b>  | .0005"/0.01mm | ±.001"   | 1.5N or less    | Digimatic IDS |
| 0 - .47" / 0 - 12mm | <b>547-312S</b> | .0005"/0.01mm | ±.001"   | 1.5N or less    | Digimatic IDC |

#### Inch Dial Type

| Range   | Order No.    | Graduation | Accuracy | Measuring force | Remarks        |
|---------|--------------|------------|----------|-----------------|----------------|
| 0 - .5" | <b>7312S</b> | .001"      | ±.001"   | 1.4N or less    | Lens thickness |

#### Metric Dial Type

| Range    | Order No.   | Graduation | Accuracy | Measuring force | Remarks        |
|----------|-------------|------------|----------|-----------------|----------------|
| 0 - 10mm | <b>7313</b> | 0.01mm     | ±15µm    | 1.4N or less    | Lens thickness |

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# Thickness Gages

**SERIES 547, 7**

## Tube thickness measurement



## SPECIFICATIONS

| Inch/Metric         |           | Digital Type  |          |                 |               |
|---------------------|-----------|---------------|----------|-----------------|---------------|
| Range               | Order No. | Resolution    | Accuracy | Measuring force | Indicator     |
| 0 - .47" / 0 - 10mm | 547-561   | .0005"/0.01mm | ±.001"   | 1.5N or less    | Digimatic IDS |
| 0 - .47" / 0 - 12mm | 547-3615  | .0005"/0.01mm | ±.001"   | 1.5N or less    | Digimatic IDC |

| Inch    |           | Dial Type  |          |                 |                |
|---------|-----------|------------|----------|-----------------|----------------|
| Range   | Order No. | Graduation | Accuracy | Measuring force | Remarks        |
| 0 - .5" | 73615     | .001"      | ±.001"   | 1.4N or less    | Tube thickness |

| Metric   |           | Dial Type  |          |                 |                |
|----------|-----------|------------|----------|-----------------|----------------|
| Range    | Order No. | Graduation | Accuracy | Measuring force | Remarks        |
| 0 - 10mm | 7360      | 0.01mm     | ±15µm    | 1.4N or less    | Tube thickness |

## Groove thickness measurement (Blade anvil type)



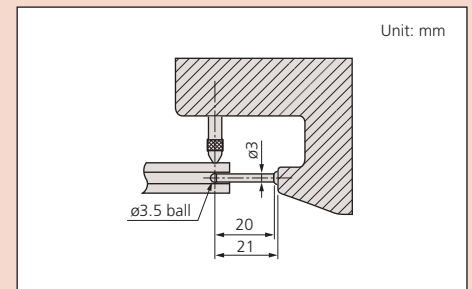
## SPECIFICATIONS

| Inch/Metric         |           | Digital Type  |          |                 |               |
|---------------------|-----------|---------------|----------|-----------------|---------------|
| Range               | Order No. | Resolution    | Accuracy | Measuring force | Indicator     |
| 0 - .47" / 0 - 12mm | 547-516   | .0005"/0.01mm | ±.001"   | 1.5N or less    | Digimatic IDS |
| 0 - .47" / 0 - 10mm | 547-3165  | .0005"/0.01mm | ±.001"   | 1.5N or less    | Digimatic IDC |

| Inch    |           | Dial Type  |          |                 |                  |
|---------|-----------|------------|----------|-----------------|------------------|
| Range   | Order No. | Graduation | Accuracy | Measuring force | Remarks          |
| 0 - .5" | 73165     | .001"      | ±.001"   | 1.4N or less    | Groove thickness |

| Metric   |           | Dial Type  |          |                 |                  |
|----------|-----------|------------|----------|-----------------|------------------|
| Range    | Order No. | Graduation | Accuracy | Measuring force | Remarks          |
| 0 - 10mm | 7315      | 0.01mm     | ±15µm    | 1.4N or less    | Groove thickness |

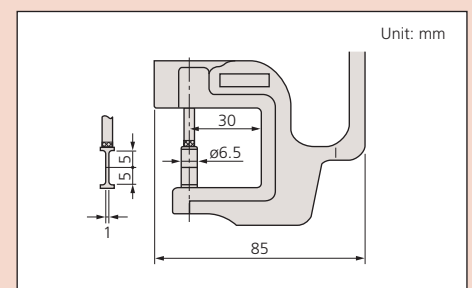
## DIMENSIONS



## Optional Accessories

- 905338: SPC cable (40" / 1m) for digital type
- 905409: SPC cable (80" / 2m) for digital type
- 902794: Spindle lifting lever for IDS digimatic type (stroke .5" / 12.7mm)
- 21AZB149: Spindle lifting lever for digimatic and dial thickness gage (stroke .5" / 12.7mm)
- 21AZB150: Spindle lifting lever for dial indicator (stroke 1" / 25.4mm)

## DIMENSIONS



# Thickness Gages

**SERIES 547, 7**

Universal Type (interchangeable anvils)



547-528

## SPECIFICATIONS

**Inch/Metric** Digital Type

| Range               | Order No.      | Resolution    | Accuracy | Measuring force | Indicator     |
|---------------------|----------------|---------------|----------|-----------------|---------------|
| 0 - .47" / 0 - 12mm | <b>547-528</b> | .0005"/0.01mm | ±.001"   | 1.5N or less    | Digimatic IDS |

**Inch** Dial Type

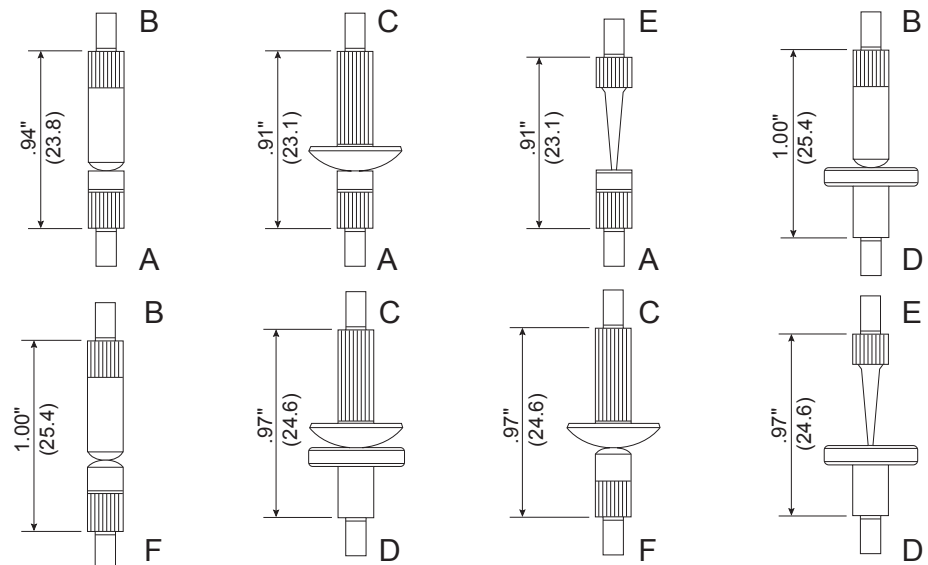
| Range   | Order No.    | Graduation | Accuracy | Measuring force | Remarks                |
|---------|--------------|------------|----------|-----------------|------------------------|
| 0 - .4" | <b>73285</b> | .001"      | ±.001"   | 1.5N or less    | Interchangeable anvils |

### Optional Accessories

- 905338:** SPC cable (40" / 1m) for digital type  
**905409:** SPC cable (80" / 2m) for digital type  
**902011:** Spindle lifting lever for metric dial type (stroke 10mm)  
**902794:** Spindle lifting lever for digital and inch dial type (stroke .4" / 10mm)

## Standard Accessories

### Recommended Combinations



- A. 133017** Flat Point ø.20  
**B. 21AAA033** Shell Point .16" Radius  
**C. 21BZA767** Spherical Point .36" Radius  
**D. 101188** Flat Point ø.50  
**E. 21AAA030** Needle Point .016" Radius  
**F. 21AAA032** Shell Point .16" Radius

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